



# INDUSTRY CIRCULAR

DEPARTMENT OF  
THE TREASURY

Bureau of Alcohol, Tobacco and Firearms  
Washington, D. C. 20226

Number: 89-3

Date: 2/23/89

## FORMULAS FOR WINES, DISTILLED SPIRITS AND FLAVORS USED IN ALCOHOL BEVERAGES

Proprietors of Bonded Wineries, Bonded Wine Cellars,  
Beverage Distilled Spirits Plants, Manufacturers of  
Flavors for Use in Alcohol Beverages and Others  
Concerned:

Purpose. The purpose of this circular is to clarify  
and provide information and guidelines for the completion  
and submission of formulas for:

1. Wines (ATF Form 5120.29)
2. Distilled Spirits (ATF Form 5110.38)
3. Flavors used in alcohol beverages

Background. The processing of each applicant's  
beverage and nonbeverage formulas can be facilitated by  
the submission of formulas that are properly completed.  
In addition to following the guidelines presented in this  
circular, the instructions on the reverse side of each  
form must be followed and each item to be completed by the  
applicant must contain the required information. The  
listing of the formula ingredients must be as specific and  
detailed as required by this circular. All ingredients  
must be approved for food or beverage use by the U.S. Food  
and Drug Administration (USFDA). Previously submitted  
formulas are not affected by the requirements of this  
circular.

This circular is divided into three sections. The first  
section deals with formulas for beverage products; the  
second section deals with formulas for flavors used in  
alcohol beverages; the third section includes examples of  
wine, distilled spirits and flavor formulas.

### Section I. BEVERAGE FORMULAS

1. General information applicable to both wine and  
distilled spirits product formulas.

#### Flavor Information

Formulas for wine and distilled spirits products produced  
with flavors must include specific information on these  
flavors.

A. If the flavor is produced in the U.S., include the following:

1. Name of the flavor
2. Name and address of the flavor manufacturer
3. Manufacturer's product number (if none, so indicate)
4. Drawback formula number (if none, so indicate)
5. Date of approval of nonbeverage formula  
(Flavor formula approval is not mandatory prior to submission of ATF Form 5120.29 or 5110.38.)
6. Alcohol content of flavor (if nonalcoholic, so indicate)
7. A description of any coloring material contained in the flavor (See Coloring Materials, page 5 of this circular.)

B. If the flavor is produced outside the U.S., include the following:

1. Name of flavor
2. Name and address of flavor manufacturer and domestic affiliate, if any
3. Manufacturer's product number (if none, so indicate)
4. Alcohol content of flavor (if nonalcoholic, so indicate)
5. A description of any coloring material contained in the flavor (See Coloring Materials, page 5 of this circular.)

(See Examples 1 and 2, Section III of this circular for examples of presentation of flavor information.)

In addition to including the information specified in A or B on the preceding page on the beverage formula, in the case of flavors produced outside the U.S., and domestically produced flavors for which no nonbeverage formula (ATF Form 5530.5) is filed, the flavor manufacturer must supply ATF with:

1. A statement (on company letterhead) quantitating the ingredients in the flavor (See Example 5, Section III of this circular),
2. An eight ounce sample of the flavor

The statement must include the name and address of the distilled spirits producer or winery purchasing the flavor and, if available, the number of the beverage formula in which the flavor will be used and the name of the beverage product. Forward the sample and statement to:

Bureau of Alcohol, Tobacco and Firearms  
National Laboratory Center  
1401 Research Boulevard  
Rockville, Maryland 20850  
Attn: NBA

The processing of the beverage formula cannot be completed until the flavor sample and statement have been evaluated by ATF.

#### Flavor Categorization

For labeling purposes ATF categorizes flavors as:

1. All natural
2. Natural and artificial containing not more than 0.1% artificial topnote
3. Natural and artificial containing greater than 0.1% artificial topnote
4. All artificial

(Artificial topnote does not include synthetic vanillin, ethyl vanillin, maltol, or ethyl maltol.) Flavors categorized as 1 or 2 are natural for alcohol beverage labeling purposes. Flavors categorized as 3 or 4 are artificial for alcohol beverage labeling purposes.

(Production with an artificial flavor, if permissible, may require labeling as an "Imitation" product or specific label disclosure of the use of an artificial flavor.)

Vanillin, Ethyl Vanillin, Maltol, Ethyl Maltol

If the levels of synthetic vanillin, ethyl vanillin, maltol and/or ethyl maltol in the finished wine or distilled spirit exceed ATF's prescribed limitations, whether added directly or through a flavor or a combination from both sources, the finished alcohol beverage will be viewed as containing an artificial flavor and appropriate labeling will be required.

The specific limitations are:

Vanillin	40 ppm (mg/l)
Ethyl vanillin	16 ppm (mg/l)
Maltol	250 ppm (mg/l)
Ethyl maltol	100 ppm (mg/l)

It is important to note that these are individual use limitations. When vanillin and ethyl vanillin are used in combination, the combined use calculated as vanillin may not exceed 40 ppm. Similarly, when maltol and ethyl maltol are used in combination, the combined use calculated as maltol may not exceed 250 ppm. In calculating combined use, ethyl vanillin and ethyl maltol can be multiplied by 2.5 to determine the equivalent amount of vanillin and maltol, respectively.

Examples:

- a. Vanillin and ethyl vanillin are added by the distilled spirits producer in the production of a liqueur in the amounts of 20 ppm vanillin and 8 ppm ethyl vanillin.

Determine the combined use of these ingredients as follows:

Vanillin	20 ppm
Ethyl vanillin converted to vanillin (8 x 2.5)	
Total	$\frac{20 \text{ ppm}}{40 \text{ ppm}}$

In this example, even though synthetic vanillin and ethyl vanillin have been added by the producer, the labeling of the product would not be affected since the combined use of the vanillin and ethyl vanillin does not exceed the 40 ppm limitation.

- b. In the same liqueur, maltol and ethyl maltol are added in the amounts of 125 ppm maltol and 100 ppm ethyl maltol.

Calculate the combined use as follows:

Maltol	125 ppm
Ethyl maltol converted to maltol (100 x 2.5)	<u>250 ppm</u>
Total	375 ppm

In this example, the combined use of maltol and ethyl maltol exceeds the 250 ppm limitation. Therefore, if labeled as a liqueur, the product would have to be designated "Imitation Liqueur."

#### Nonoptional Ingredients

Ingredients that affect products labeled under the Federal Alcohol Administration Act (FAA Act) e.g., coloring material (added directly or through a flavor), artificial flavors, or some limited ingredients, may not be shown as "optional" (or shown as added in a range of "0 - \_\_\_\_"). Such ingredients may not be added or deleted by rider (for wines) or superseding formula (for distilled spirits).

#### Coloring Materials

Coloring materials must be specifically identified in formulas. "Certified Color," for example, or "Green Shade #55" are not acceptable. The reference must include the name and number of the certified color such as "FD&C Red 40" or the specific components of a coloring material marketed under a commercial/product name. If a flavor used in the production of the alcohol beverage contains a coloring material, this information must be included with the flavor information on the formula -- "contains FD&C Yellow 5 and caramel color."

#### Address Information

Submit formula applications for beverage wine and distilled spirits products to:

Bureau of Alcohol, Tobacco and Firearms  
Product Compliance Branch  
1200 Pennsylvania Avenue, NW  
Washington, DC 20226

2. Specific information regarding Forms 5120.29 and 5110.38

Form 5120.29 Formula and Process for Wine

- A. Formulas must be numbered sequentially. (Item 1 of form.)
- B. Flavored wines, overameliorated wines (wine produced with sugar and water in excess of the 35% by volume limit prescribed in 27 CFR Part 240) and/or wines produced by authorized but nonstandard processes must be referenced as "Other than Standard Wine" in Item 4 of the form.
- C. Item 5 of the form must include the total yield of wine product being produced and the quantity of each ingredient. The yield and ingredient quantities may be stated in ranges, e.g., "yield -- 90-100 gallons," "orange juice concentrate -- 4-8 gallons." The total of the ingredients listed must equal the stated yield. (See calculations for Example 1, Section III of this circular.)
- D. Specifically identify the base wine by class and type in accordance with 27 CFR 4.21, and state its alcohol content.
- E. Specify the alcohol content of the finished product. This may be stated in a range but must not cross tax categories.

Form 5110.38 - Formula for Distilled Spirits under the Federal Alcohol Administration Act

- A. Formulated distilled spirits products not conforming to one of the classes described in 27 CFR 5.22 must be identified as "Distilled Spirits Specialty" in Item 1 of the form.
- B. Formulas must be numbered sequentially. (Item 12 of form.) Formula numbers for multiple plant formulas must be preceded by the letter "M." (See Example 2, Section III of this circular.)

- C. Although quantitative information is not generally required for distilled spirits product formulas, the inclusion of maximum use rates (stated in percent by volume) for flavors is necessary. With this information, ATF can determine whether there is a usage problem for flavors containing limited ingredients. If the proposed usage is not indicated on the formula, processing is delayed because ATF must return the formula to the applicant to request use levels for any flavors containing limited ingredients.
- D. Ingredients that are added by the distilled spirits producer which are subject to USFDA use limitations must be quantitated on the formula. Show the exact amount to be used, the range, or the maximum possible usage, i.e., "use will not exceed \_\_\_\_." Examples of such ingredients:

<u>Ingredient</u>	<u>Limit</u>	<u>USFDA Regulations (21 CFR)</u>
Ester gum	100 ppm	172.735
Sodium benzoate	1,000 ppm	184.1733
Gum arabic/gum acacia	10,000 ppm	184.1330
Brominated vegetable oil	15 ppm	180.30
Propylene glycol	50,000 ppm	184.1666

- E. If the product contains wine, each wine must be identified as to class and type and alcohol content. For each wine produced under a formula, the formula number, name and address of the wine producer must be included. The percentage of wine (on a proof gallon basis) to be used in the finished product must be specified. (See Example 2, Section III of this circular.)
- F. If the product is to be labeled as a blend of different classes and types of distilled spirits (such as "Strawberry Liqueur and Brandy") or distilled spirits and a nonalcoholic component (such as "Coffee Liqueur and Cream") the production of each type of distilled spirit must be clearly shown by the ordering and listing of the ingredients. That is, for the examples stated, the production of the strawberry liqueur must be distinguished from the production of the brandy. (See Example 2, Section III of this circular.) The percentage (on a proof gallon basis) of each class and type of distilled spirit must be

included on the formula. If the product is not comprised of substantially equal amounts of each class and type of spirit, the percentages must be indicated on the product label. (Substantially equal means that neither spirit component contributes less than 40% of the total alcohol.) In the case of the "Coffee Liqueur and Cream," the cream must be shown as a separate component of the finished product rather than as an ingredient of the coffee liqueur.

## SECTION II. FLAVOR FORMULAS

The manufacturer of any flavor used in an alcohol beverage is required to provide a quantitative formula to the Bureau. These formulations must provide all the information necessary for the proper classification and labeling of finished alcohol beverage products. These flavor formulations may be submitted on ATF Form 5530.5 by those domestic producers who file claims as manufacturers of nonbeverage products. (See Example 3, Section III of this circular.) If the formula does not contain any added taxpaid alcohol the form 5530.5 will be stamped "NO ACTION." (See Example 4, Section III of this circular.) This signifies that the flavor information was received by the Bureau and that the product does not contain any alcohol that is eligible for drawback. All other manufacturers, whether foreign or domestic, should submit their formulas on company letterhead. (See Example 5, Section III of this circular.) A representative eight ounce sample must accompany each formula submission.

All flavor formulas, regardless of the form of submission, must include the following:

1. Name of product and manufacturer's product number
2. Alcohol content
3. Formula number (if submitted on form 5530.5)
4. A quantitative list of ingredients
5. Name and address of alcohol beverage manufacturer purchasing the flavor (if available)
6. A statement that all ingredients used are Generally Recognized as Safe (GRAS) by the



Flavor and Extract Manufacturers's Association  
(FEMA) and/or approved for use in alcohol  
beverages by the USFDA

Quantitative Formula

- A. Natural flavoring materials approved for use without limitation or restriction by the USFDA must be listed. These ingredients may be grouped by type with the predominant flavoring specified and the total quantity of that grouping stated.

Examples:

1. Strawberry and other fruit juices
2. Orange oil and other citrus oils
3. Orris concrete (21 CFR 172.510)
4. Bergamot oil (21 CFR 182.20)

- B. Natural flavorings that are approved for use with limitation or restriction must be specified and quantitated individually. If the ingredient has a restricted use, it must be indicated that this restriction is followed. In addition, the formula must state where the approval for use is found in the USFDA regulations.

Examples:

1. Bitter almond oil (Free from prussic acid, FFPA, 21 CFR 182.20)
2. Wormwood/Artemisia (Thujone free, 21 CFR 172.510)
3. Cinchona extract (6% total alkaloids, 21 CFR 172.510)
4. Oil of rue (21 CFR 184.1699)

- C. All artificial flavors (including those considered nature identical) must be listed and quantitated. All ingredients must be approved by the USFDA or be listed as FEMA GRAS. If the flavorings are approved for use without limitation or restriction they may be grouped together as in Example 1 on page 10 with the predominant flavoring by quantity specified. All flavor ingredients with specific limitations or restrictions must be listed separately as in Example 4 at the top of page 10.

Examples:

1. Ethyl acetate and other esters
  2. Benzaldehyde (21 CFR 182.60)
  3. Cinnamic acid (21 CFR 172.515)
  4. Caprylic acid (21 CFR 184.1025)
- D. All nonflavor ingredients such as preservatives, acidulants, solvents, etc., must be listed and quantitated separately. The formula must also state where the approval for use is found in the USFDA regulations.

Examples:

1. Tannic acid (21 CFR 184.1097)
  2. Propylene glycol (21 CFR 184.1666)
  3. Butylated hydroxyanisole (BHA, 21 CFR 172.515)
  4. Brominated vegetable oil (BVO, 21 CFR 180.30)
- E. The following four ingredients must be specified and quantitated individually because of their special use restrictions. (See page 4 of this circular.)
1. Vanillin
  2. Ethyl Vanillin
  3. Maltol
  4. Ethyl Maltol

A statement confirming the absence of synthetic vanillin, ethyl vanillin, maltol or ethyl maltol is also required.

- F. Flavors that are ingredients in the finished flavor formula must be identified by the following:
1. Name of the flavor
  2. Name and address of flavor manufacturer
  3. Manufacturer's product number (if none, so indicate)
  4. Drawback formula number (if none, so indicate)
  5. Date of approval of nonbeverage formula
  6. Alcohol content of flavor (if nonalcoholic, so indicate)

- G. All colors including FD&C certified colors and other colorants exempt from certification (such as caramel, annatto, etc.) must be disclosed. If an ingredient (such as saffron or elderberry extract) can be used as a colorant but also has other functions, the particular function or functions of the ingredient in the product must be stated.

Address Information

Flavor formulas and samples should be sent to:

Bureau of Alcohol, Tobacco and Firearms  
National Laboratory Center  
1401 Research Boulevard  
Rockville, Maryland 20850  
Attn: NBA

### Section III. EXAMPLE FORMULAS

DEPARTMENT OF THE TREASURY — BUREAU OF ALCOHOL, TOBACCO AND FIREARMS <b>FORMULA AND PROCESS FOR WINE</b> <i>(Prepare in triplicate - See instructions on back)</i>		1. FORMULA NO. <div style="text-align: right; font-size: 1.2em;"><b>EXAMPLE #1</b></div> <div style="text-align: center;">1</div>
2. PROPRIETOR (Name, Number, Street, City, State, ZIP Code) ABC Winery Company 1121 Old King Highway Fredericksburg, Virginia 17426	3. (Check applicable box) <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> BONDED WINERY         </div> <div> <input checked="" type="checkbox"/> BONDED WINE CELLAR         </div> <div>           NO.            VA-379         </div> </div>	
4. NAME OF PRODUCT UNDER WHICH TO BE MARKETING ** Other than Standard Wine (Strawberry Festival)		
5. FORMULA - Ingredients (State quantitatively) <i>(Use back if more space is needed)</i> Ingredients per 1,000 gallon batch of finished product: 1. Grape Wine 12-14% alc. by vol. Use: 588-794 gallons 2. High Fructose Corn Syrup Use: 200-400 gallons 3. Sodium Benzoate/Potassium Sorbate Use: Combined use will not exceed 1,000 ppm 4.* Natural and Artificial Strawberry Flavor #3501, produced by Special Flavors Inc., Marseilles, France, nonalcoholic, contains FD&C Red 40, Yellow 5 and elderberry extract Use: 2.5-5 gallons 5.* Natural and Artificial Berry Flavor #3222, produced by Everyday Food Products, Chicago, Illinois ATF Formula #1250, approved 5/25/84, 21-24% alc. by vol. Use: 3.5-7 gallons 6. Ethyl Maltol Use: 25-50 ppm  Alcohol Content of finished product 7-11.5%	6. PROCESS OF PRODUCTION <i>(Use back if more space is needed)</i> All ingredients are thoroughly blended.  <div style="text-align: right;">           * "Natural and Artificial Flavors" (USFDA): Predominantly Natural for ATF labeling. (Contains not more than 0.1% topnote material)         </div>	
7. DATE Sept. 12, 1987	8. PROPRIETOR ABC Winery Company	9A. BY (Signature and title) <div style="text-align: right;">             Winemaker         </div>
<b>ACTION BY DIRECTOR, BUREAU OF ALCOHOL, TOBACCO AND FIREARMS</b>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> <b>APPROVED FOR MANUFACTURE ON BONDED WINE CELLAR OR BONDED WINERY PREMISES AND LABELING UNDER NAME OF PRODUCT SPECIFIED ABOVE.</b>            ** The designation of the product must be followed by a truthful and adequate statement of composition, such as "Grape Wine with Natural Flavors, and Artificial Color Added"         </div> <div style="width: 50%; text-align: right;"> <b>APPROVED SUBJECT TO THE PROVISIONS OF 27 CFR 240.488</b>              Contains FD&amp;C Yellow #5         </div> </div>		
<input type="checkbox"/> <b>DISAPPROVED.</b>		
DATE <div style="font-size: 1.5em; font-weight: bold;">SEP 30 1987</div>	SIGNATURE OF THE DIRECTOR, BUREAU OF ALCOHOL, TOBACCO AND FIREARMS <div style="text-align: right;">   <b>Specialist</b>  <b>FOR THE DIRECTOR</b> </div>	

OTHER THAN STANDARD WINE  
(STRAWBERRY FESTIVAL)  
FORMULA #1

Before approving this formula ATF determined, in part, that:

1. Each flavor is used within its prescribed limitation.
2. Vanillin and maltol limitations were not exceeded. To determine this ATF calculated as follows:

Vanillin

Berry flavor #3222 contains 720 ppm ethyl vanillin (see Example 3 of this section) and is used at a maximum rate of 7 gallons per 1000 gallons (.7% by volume). Maximum use for this flavor, based on ethyl vanillin content, is 2.22%.

Maltol

- a. Strawberry Flavor #3501 contains 25,000 ppm maltol (See Example 5 of this section) and is used at a maximum of 5 gallons per 1000 gallons (.5%).

$$25,000 \times .5\% = 125 \text{ ppm maltol}$$

- b. The producer adds up to 50 ppm ethyl maltol

$$\begin{array}{rcl} 50 \times 2.5 \text{ (conversion factor)} & = & \frac{125}{250} \text{ ppm maltol} \\ \text{Total} & & \end{array}$$

Note:

Calculations are based on maximum possible usage.

3. The total of the ingredients equals the stated yield. To determine this ATF calculates as follows:

- a. Minimum quantity of wine with maximum quantities of all other ingredients.

$$\begin{array}{r} 588.00 \\ 400.00 \\ 5.00 \\ 7.00 \\ \hline 1000.00 \end{array}$$

- b. Maximum quantity of wine with minimum quantities of all other ingredients.

794.00
200.00
2.50
<u>3.50</u>
1000.00

4. The alcohol content of the finished product is correct based on the alcohol content of each component and the total yield. To determine this ATF calculates the gallons of alcohol contributed by each alcoholic component and the resulting amount of alcohol in the finished product.

Example

588 gals wine @ 14% alc = 82.3 gals alc

7 gals Berry flavor @ 24% alc = 1.7 gals alc

Total gals alc = 84.0

$$\frac{(\text{Total gallons alcohol})}{(\text{Total yield})} \times 100 = \frac{84}{1000} \times 100 = 8.4\% \text{ alcohol}$$

## DEPARTMENT OF THE TREASURY — BUREAU OF ALCOHOL, TOBACCO AND FIREARMS

# FORMULA FOR DISTILLED SPIRITS UNDER THE FEDERAL ALCOHOL ADMINISTRATION ACT

(See Instructions and Conditions on reverse)

1. CLASS AND TYPE OF PRODUCT Distilled Spirits Specialty (Strawberry and Brandy)		2. NAME, ADDRESS, AND PLANT NUMBER(S) OF MANUFACTURER (See Instructions) The M Company, Inc. Rural Route 2, Box #50 Posen, Michigan 34905 DSP-MI-798	
3. PROOF (Range may be shown)  30 -- 60		230 W. Pratt Street Baltimore, Maryland 30785 DSP-MD-527  * "Natural and Artificial Flavoring" (USFDA): Predominantly Natural for ATF labeling. (Contains not more than 0.1% topnote material)	
4. FORMULAS SUPERSEDED:			
PLANT NUMBER	FORMULA NUMBER		
5. FORMULA (Use reverse if more space is needed) Part A***Strawberry Liqueur (not less than 40% of the finished product on a proof gallon basis) 1. Grain Neutral Spirits 2. Other than Standard Grape Wine 10-13% alc by vol produced by XYZ Winery, Madison, Wisconsin, under Formula #3 -- USE: will not exceed 10% on a proof gallon basis of Strawberry Liqueur 3. Sugar -- USE: not less than 2.5% by weight *4. Natural & Artificial Strawberry Flavor #3501 produced by Special Flavors, Inc., Marseilles, France, nonalcoholic, con- tains FD&C Red 40, Yellow 5, and elderberry extract -- USE: .25 - .5% by vol. *5. Natural & Artificial Berry Flavor #3222 produced by Everyday Food Products, Chicago, Illinois, ATF Formula #1250, approved 5/25/84, 21-24% alc. by vol.-- USE: .5 - 1% by vol. 6. Ethyl Maltol -- USE: will not exceed 50 ppm 7. Vanillin -- USE: will not exceed 20 ppm			

(OVER)

6. DATE July 14, 1987	7. MANUFACTURER The M Company, Inc.	8. BY (Signature and Title) <i>Ralph Owen</i> President
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## FOR ATF USE ONLY (Items 9, 10 and 11)

9. <input checked="" type="checkbox"/> Harmless coloring, flavoring or blending materials must not total more than 2.5% by volume of the finished product. <i>brandy.</i> <input checked="" type="checkbox"/> Sugar, dextrose or levulose or a combination thereof must be used in an amount not less than 2.5% by weight of the cordial or liqueur. <input type="checkbox"/> The use of refining agents must not alter the basic characteristics or composition of the spirits. <input type="checkbox"/> The blended whiskey must contain not less than 20% straight whiskey on a proof gallon basis.		LABELING (finished product only) <i>Such as "Strawberry Liqueur and Brandy, Artificial Color Added"</i> <input checked="" type="checkbox"/> The designation of the product must include a truthful and adequate statement of composition. <input checked="" type="checkbox"/> The label must indicate the use of: <input type="checkbox"/> caramel <input checked="" type="checkbox"/> certified color ( <i>Red #40</i> ) <input type="checkbox"/> artificial flavor <input type="checkbox"/> wine <input checked="" type="checkbox"/> <i>Elderberry Extract</i> <input checked="" type="checkbox"/> <i>Yellow #5</i>	
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10. DATE <b>JUL 28 1987</b>	11. APPROVED — ATF SPECIALIST FOR THE DIRECTOR, BUREAU OF ALCOHOL, TOBACCO AND FIREARMS. <i>Lynne S. [Signature]</i>	12. FORMULA NUMBER M-1
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Part B. Grape Brandy (not less than 40% of the finished product on a proof gallon basis)

1. Grape Brandy

\*\*\* 2. Caramel

\*\*\* 3. Sherry Wine (not a formula wine)

\*\*\* 4. Modifier Flavor #25, produced by Better Flavors, Inc., Pasadena, California, ATF Formula #13, no approval date, 36% alc. by vol., contains caramel color -- USE: will not exceed 1.5% by vol.

**GENERAL INSTRUCTIONS**

Every person who is required to file a formula under 27 CFR, Part 5, shall submit this form to the Commodity Classification Branch, Bureau of Alcohol, Tobacco and Firearms, Washington, DC 20226, for each formula covering treatment of distilled spirits. Plant qualification and formula approval are required prior to manufacture of any product requiring a formula.

The number of copies to be filed is as follows: one copy for the Director, one copy for each ATF region in which a distilled spirits plant identified in item 2 is located, and either one additional copy or one additional copy for each distilled spirits plant identified in item 2. However, manufacturers in Puerto Rico shall file this form in quadruplicate.

If the formula is approved, one approved copy will be retained by ATF, one approved copy will be sent to each appropriate regional regulatory administrator and the remaining approved copy(ies) will be sent to the addressee. The addressee will forward approved copies (or two-sided reproductions) to each distilled spirits plant identified in item 2.

**SPECIFIC INSTRUCTIONS**

**Item 1.** The class and type must agree with one of the class and type designations in the regulations issued under the Federal Alcohol Administration Act, except for distilled spirit specialties or cocktails which may be designated as such for formula approval. Do not show a brand or fanciful name.

**Item 2.** Enter the name, complete address and plant number of the applicant and the city, State and plant number for all other plants where the product will be manufactured.

**Item 3.** If the product will be bottled at more than one proof, state the alcoholic content as a range to include all proofs at which the product will be bottled.

**Item 4.** Enter DSP number and formula number for each formula which is superseded.

**Item 5.**

- (a) List all ingredients which will be used. Flavoring or blending materials must be identified by flavor title, name and address of the manufacturer or the importer, if alcoholic, the percentage of alcohol by volume and the manufacturer's commercial formula number, or if approved on ATF Form 1678 or 5110.38, the formula number and date of approval.
- (b) Identify all coloring agents added directly to the product or contained in flavor materials. Certified food colors must be identified by FD&C number, for example "FD&C Yellow No. 5."
- (c) If any type of wine (including vermouth) is to be used in the product, state the kind, percentage of wine to be used, whether the wine is domestic or imported, whether the wine contains added wine spirits, and the percentage of alcohol by volume of the wine.
- (d) If the finished product is to be labeled as containing a particular class and type of distilled spirits (such as "Blackberry Liqueur & Brandy" or "Coffee Liqueur & Non-Dairy Creamer") the ingredients used to produce the particular class and type of distilled spirits must be listed in a manner so that they are distinguishable from the remaining ingredients for the finished product.

**Item 12.** Number formulas in sequence. A proprietor of more than one distilled spirits plant shall use a unique system of serial numbers which does not duplicate any formula number used at any plant prior to January 1, 1980.

**CONDITIONS FOR FORMULA APPROVAL**

This approval is granted under 27 CFR, Part 5 and does not in any way provide exemption from or waiver of the provisions of the Food and Drug Administration regulations relating to the use of food and color additives in food products.

Addition of remnants or returned merchandise to a completed product made under the same formula is permitted.

**PAPERWORK REDUCTION ACT NOTICE**

This request is in accordance with Section 3507, Public Law 96-511, December 11, 1980. This information collection is used by ATF to determine proper classification of spirits for labeling and consumer protection purposes. The information is required to obtain a benefit.

DEPARTMENT OF THE TREASURY — BUREAU OF ALCOHOL, TOBACCO AND FIREARMS

# FORMULA AND PROCESS FOR NONBEVERAGE PRODUCT

(See instructions on back - submit in quadruplicate)

1. DATE  
5/13/84

2. FORMULA NUMBER  
1250

3. NAME OF APPLICANT

Everyday Food Products

4. ADDRESS (Same as on special tax stamp)

1234 West Blvd., Chicago, IL

5. NAME OF PRODUCT

Natural and Artificial  
Berry Flavor #3222

6. TYPE OF PRODUCT

Flavor

7. KIND AND PROOF OF SPIRITS USED

Alcohol 190°

8. NUMBER OF DAYS REQUIRED TO COMPLETE PROCESS

1

9. ELIGIBLE ABSOLUTE ALCOHOL BY VOLUME USED

23.75 %

10. ABSOLUTE ALCOHOL BY VOLUME IN FINISHED PRODUCT

21 -24 %

11. FORMULA AND PROCESS (Use units of volume, either English or metric, for ingredients that contain alcohol and yields of liquid products; use units of weight, either English or metric, for yields of solid products)

32.0 fl. oz. Alcohol 190°  
60.0 fl. oz. Strawberry, Blackberry and other fruit juices  
0.006 lbs. Ethyl Vanillin  
0.10 fl. oz. Benzaldehyde 21 CFR 182.60  
0.50 fl. oz. Bitter Almond Oil (FFPA) 21 CFR 182.20  
0.20 fl. oz. Wormwood (Thujone Free) 21 CFR 172.510  
0.001 lbs. Caprylic Acid 21 CFR 184.1025  
35.0 fl. oz. Water

1 gal. = Yield

This flavor does not contain Vanillin, Maltol, or Ethyl Maltol.

All ingredients used are GRAS by FEMA and/or are approved for use in alcohol beverages by the USFDA.

(Use blank space on back if necessary)

12. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT

Mary E. Smith

PLEASE MAKE NO ENTRY BELOW THIS LINE

13. LAB. NO. SAMPLE

17. ACTION:

14. ALCOHOL BY VOLUME

%

15. ANALYST

James M. Burggraff

16. DATE

JUN 25 1984

APPROVED SUBJECT TO COMPLIANCE WITH  
U.S. FOOD AND DRUG ADMINISTRATION  
REGULATIONS  
APPROVED SUBJECT TO COMPLIANCE WITH  
U.S. FOOD AND DRUG ADMINISTRATION  
LABELING REGULATIONS

James M. Burggraff Analyst

DISTILLED SPIRITS SPECIALTY  
(STRAWBERRY AND BRANDY)  
FORMULA #M-1

Before approving this formula ATF determined, in part,  
that:

1. Each flavor is used within its prescribed limitation.
2. Vanillin and maltol limitations were not exceeded. To determine this ATF calculated as follows:

Vanillin

- a. Berry flavor #3222 contains 720 ppm ethyl vanillin (See Example 3 of this section) and is used at a maximum of 1% by volume

$$720 \times 1\% \times 2.5 \text{ (conversion factor)} = 18 \text{ ppm vanillin}$$

- b. The producer adds up to  

Total       $\frac{20}{38}$  ppm vanillin

Maltol

- a. Strawberry flavor #3501 contains 25,000 ppm maltol (See Example 5 of this section) and is used at a maximum of .5% by volume

$$25,000 \times .5\% = 125 \text{ ppm maltol}$$

- b. The producer adds up to 50 ppm ethyl maltol

$$50 \times 2.5 \text{ (conversion factor)} = 125 \text{ ppm maltol}$$

Total  $\frac{125}{250}$  ppm maltol

Note:

Calculations are based on maximum usage.

DEPARTMENT OF THE TREASURY — BUREAU OF ALCOHOL, TOBACCO AND FIREARMS <b>FORMULA AND PROCESS FOR NONBEVERAGE PRODUCT</b> <i>(See instructions on back - submit in quadruplicate)</i>		1. DATE <div style="text-align: center;">5/23/88</div>
3. NAME OF APPLICANT <div style="text-align: center;">Better Flavors, Inc.</div>		2. FORMULA NUMBER <div style="text-align: center;">13</div>
4. ADDRESS <i>(Same as on special tax stamp)</i> <div style="text-align: center;">45 Rose Way, Pasadena, CA</div>		
5. NAME OF PRODUCT <div style="text-align: center;">Modifier Flavor #25</div>	6. TYPE OF PRODUCT <div style="text-align: center;">Flavor</div>	
7. KIND AND PROOF OF SPIRITS USED <div style="text-align: center;">None</div>	8. NUMBER OF DAYS REQUIRED TO COMPLETE PROCESS <div style="text-align: center;">1</div>	
9. ELIGIBLE ABSOLUTE ALCOHOL BY VOLUME USED <div style="text-align: center;">0 %</div>	10. ABSOLUTE ALCOHOL BY VOLUME IN FINISHED PRODUCT <div style="text-align: center;">36 %</div>	
11. FORMULA AND PROCESS <i>(Use units of volume, either English or metric, for ingredients that contain alcohol and yields of liquid products; use units of weight, either English or metric, for yields of solid products)</i>  <div style="font-family: monospace;">           5.1 lbs.    Tannic Acid 21 CFR 184.1097            80.0 gals.    Natural Brandy Fl. #23904 (XYZ Flavor Company, Trenton, NJ)                                Formula #212, Alcohol content = 45%, approved 10/12/84            10.0 gals.    Propylene Glycol 21 CFR 184.1666            0.01 lbs.    Bergamot Oil 21 CFR 182.20            Q.S.        Caramel Color 2X            Q.S.        Water  <hr style="width: 100px; margin-left: 0;"/>           100 gals. = Yield         </div>  <div style="font-family: monospace;">           This Flavor does not contain Vanillin, Ethyl Vanillin, Maltol, or Ethyl Maltol.             All ingredients used are GRAS by FEMA and/or are approved for use in alcohol beverages by the USFDA.         </div>		
<i>(Use blank space on back if necessary)</i>		
12. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT <div style="font-family: cursive; font-size: 1.5em; margin-top: 10px;">John Henry</div>		
<b>PLEASE MAKE NO ENTRY BELOW THIS LINE</b>		
13. LAB. NO. SAMPLE	<div style="font-size: 3em; font-weight: bold;">NO ACTION</div>	
14. ALCOHOL BY VOLUME  <div style="text-align: center;">%</div>		
15. ANALYST		
16. DATE		
17. ACTION:		

Natural & Artificial Berry Flavor #3222

ATF is able to develop the following information from this flavor formulation:

1. The flavor is natural and artificial with less than 0.1% artificial topnote. (Natural for alcohol beverage labeling purposes.)
2. The flavor does not contain any coloring material.
3. The flavor contains the following limited or restricted ingredients:

<u>Ingredient</u>	<u>Level</u>	<u>Maximum use rate of the flavor</u>
Ethyl vanillin	720 mg/l	2.22%
Caprylic acid	120 mg/l	8.33%
Wormwood		(Thujone free)
Bitter almond oil		(FFPA)

SPECIAL FLAVORS INC.  
Marseilles, France

The following quantitative formula is provided for our flavor, Natural and Artificial Strawberry Flavor #3501 (nonalcoholic).

Purchaser: The M Company, Inc.  
Rural Route 2, Box 50  
Posen, Michigan 34905  
and  
230 W. Pratt Street  
Baltimore, Maryland 30785

Nat. & Art. Strawberry Flavor #3501

- 40 lbs. Strawberry juice concentrate and other fruit juices. (All approved for use without limitation or restriction by USFDA)
- 0.5 lbs. Orange oil and other citrus oils (with 0.5% BHA)
- 0.2 lbs. Orris Concrete (21 CFR 172.510)
- 0.1 lbs. Ethyl butyrate and other artificial esters (approved for use without limitation by USFDA or FEMA GRAS)
- 2.5 lbs. Maltol (21 CFR 172.515)
- 10 lbs. b Cloud Emulsion #65 (3% BVO 21 CFR 180.30, 7.5% Ester Gum 21 CFR 172.735, and citrus oils)
- 0.1 lbs. Sodium benzoate (21 CFR 184.1733)
- Q.S. Strawberry shade (FD&C Red #4 and FD&C Yellow #5)
- Q.S. Elderberry Extract (for Color)

100 lbs. Yield (12.0 Gallons)

Alcohol content = 0

This flavor does not contain vanillin, ethyl vanillin or ethyl maltol.

All ingredients used are GRAS by FEMA and/or approved for use in alcohol beverages by the USFDA.

## Modifier Flavor #25

ATF is able to develop the following information from this flavor formulation:

1. Intermediate flavor #212 is an all natural flavor with no coloring material added and with no limited ingredients.
2. This flavor is all natural.
3. This flavor contains caramel color.
4. This flavor contains the following limited ingredients:

<u>Ingredient</u>	<u>Level</u>	<u>Maximum use rate of the flavor</u>
Tannic acid	5,991 mg/l	2.50%
Propylene glycol	100,000 mg/l	50%

Nat. & Art. Strawberry Flavor #3501

ATF is able to develop the following information from this flavor formulation:

1. It is a natural and artificial flavor with 0.1% artificial topnote. (Natural for alcohol beverage labeling purposes.)
2. The flavor contains the named fruit (strawberry).
3. The flavor contains the following colors: FD&C Red 40, FD&C Yellow 5 and elderberry extract.
4. The flavor contains the following limited or restricted ingredients:

<u>Ingredient</u>	<u>Level</u>	<u>Maximum use rate of the flavor</u>
Sodium benzoate	1,000 mg/l	No limit
BHA	less than 0.5% of the essential oil content	No limit
Maltol	25,000 mg/l	1.0%
BVO	3,000 mg/l	0.5%
Ester gum	7,500 mg/l	1.33%



Inquiries. Inquiries concerning this circular should refer to its number and be addressed to: Associate Director (Compliance Operations), Bureau of Alcohol, Tobacco and Firearms, 1200 Pennsylvania Avenue NW, Washington, DC 20226.

  
Director